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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/182,875	10/30/1998	MANABU HYODO	0879-0217P	2496

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EXAMINER

WHIPKEY, JASON T

ART UNIT	PAPER NUMBER
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2612

DATE MAILED: 08/14/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/182,875

Applicant(s)

HYODO ET AL.

Examiner

Jason T. Whipkey

Art Unit

2612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 October 1998 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4. 6) ☐ Other: .

DETAILED ACTION

Specification

1. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.
- ✓2. The disclosure is objected to because of the following informality: The sentence of lines 7-9 of page 4 is incomprehensible.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- ✓4. Claim 4 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 4 recites the limitation "the positional information determining device" in lines 2-3. There is insufficient antecedent basis for this limitation in the claim. For

examination purposes, the examiner will assume the applicant intended to claim "the positional information acquiring device."

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 1-3, 5-9, 11, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki in view of Sakaegi.

Regarding claims 1 and 6, Suzuki discloses a digital still video camera that records a captured image on a memory card 103. A lens unit 104 directs light onto CCD 105. The camera is instructed to take a photograph using a shutter button (column 42, line 62). Monitor unit 102 shows a photographed image (column 10, lines 31-32). In order to determine the subject of photography, an image mask is placed over the image displayed on LCD 119 (column 42, lines 51-57). The unmasked area is used as the main subject. The masks may be defined by the user (column 43, lines 25-33). The image data and the mask used are recorded on the memory card 103 (column 42, lines 58-67).

Suzuki is silent with regard to using a touch panel to define a mask.

Sakaegi discloses a method and apparatus for designating an area on a viewfinder. The user moves a cursor around a main subject to denote an area (column 5, lines 38-41). A touch panel may be used with the invention (column 7, lines 35-37). Though it is not specifically disclosed that the touch panel is placed over electronic viewfinder 19, an advantage to such an arrangement would be that user could easily trace a subject. For this reason, it would have been obvious for Sakaegi to place the touch panel on top of EVF 19.

An advantage to using Sakaegi's subject-defining means is that it allows the user to generate a mask based on the actual image data, rather than having to place the subject within a mask. This makes the masking operation more accurate. For this reason, it would have been obvious to have Suzuki's camera include Sakaegi's subject-defining means.

Regarding claims 2, 3, and 7-9, only the image information defined by the cut-out subject area is provided to auto-exposure circuit 11, auto white-balancing circuit 13, and focus-detecting circuit 14 (column 5, lines 60-64). The advantage to using an area defined as a main subject to control AE, AWB, and AF is that it allows the user to ensure that the main subject is focused and properly exposed. For this reason, it would have been obvious for Suzuki's camera to base AE, AWB, and AF on the image of a main subject area.

Regarding claims 5 and 11, system controller 7 controls the overall system (column 3, lines 35-36). While not specifically stated, it is inherent that Sakaegi's subject-defining means detects a closed figure, as only a closed figure can be considered a valid subject-defining area — a figure that is not closed does cannot define an area. A defined area is shown in Figure 2C. A circle is depicted by controller 7 to show the defined area (column 5, lines 54-55). This area is the main subject area, and is used in the AE, AF, and AWB processing described above.

Regarding claim 19, Suzuki discloses a digital still video camera that records a captured image on a memory card 103. A lens unit 104 directs light onto CCD 105. The camera is instructed to take a photograph using a shutter button (column 42, line 62). Monitor unit 102 shows a photographed image (column 10, lines 31-32). In order to determine the subject of photography, an image mask is placed over the image displayed on LCD 119 (column 42, lines 51-57). The unmasked area is used as the main subject. The masks may be defined by the user (column 43, lines 25-33). The image data and the mask used are recorded on the memory card 103.

Suzuki is silent with regard to using a pointing device to define a mask.

Sakaegi discloses a method and apparatus for designating an area on a viewfinder. The user moves a cursor around a main subject to denote an area (column 5, lines 38-41). A mouse may be used with the invention (column 7, line 35).

An advantage to using Sakaegi's subject-defining means is that it allows the user to generate a mask based on the actual image data, rather than having to place the subject within a mask. This makes the masking operation more accurate. For this reason, it would have been obvious to have Suzuki's camera include Sakaegi's subject-defining means.

8. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki in view of Sakaegi and further in view of Maurinus.

Claim 4 may be treated like claim 1. However, both Suzuki and Sakaegi are silent with regard to using a touch panel to direct to instruct the camera to record an image.

Maurinus discloses an electronic photography system. When a captured image is displayed to a user on a touchscreen CRT 58, the user may manipulate and select an image to be recorded on a magnetic or optical digital storage medium (column 3, lines 35-45). The advantage to using a touchscreen to initiate recording is that it simplifies the user interface, allowing for the elimination of a shutter button. For this reason, it would have been obvious for the cameras described by Suzuki and Sakaegi to record a captured image on a recording medium using a touchscreen.

9. Claims 10 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki in view of Sakegi and further in view of Kaji.

Claim 10 may be treated like claim 6. However, both Suzuki and Sakaegi are silent with regard to expanding and reducing an image captured about a reference point.

Kaji discloses an image pickup apparatus. A user may enlarge an image displayed on electronic viewfinder 12 using an enlargement execution switch 8 (column 4, lines 18-20). The position of the enlargement is variable (column 4, lines 22-24). The enlargement amount is also variable (column 4, lines 32-33). If an image may be enlarged, it is inherent that the image may then be reduced. The advantage to reducing and enlarging a captured image about a reference point is that the user may view the details of a captured image to decide if the image is adequate while ignoring those parts of the image not relevant. For this reason, it would have been obvious to have the cameras described by Suzuki and Sakaegi enlarge and reduce a captured image on the display about the main subject area.

Regarding claim 18, Suzuki discloses a camera as described in the rejection of claim 1. However, both Suzuki and Sakaegi are silent with regard to using a display with an image processor for expanding or reducing an image.

Kaji discloses an image pickup apparatus. A user may enlarge an image displayed on electronic viewfinder 12 using an enlargement execution switch 8 (column 4, lines 18-20). The position of the enlargement is variable (column 4, lines 22-24).

The enlargement amount is also variable (column 4, lines 32-33). If an image may be enlarged, it is inherent that the image may then be reduced. The advantage to reducing and enlarging a captured image about a reference point is that the user may view the details of a captured image to decide if the image is adequate while ignoring those parts of the image not relevant. For this reason, it would have been obvious to have a display connected to the cameras described by Suzuki and Sakaegi enlarge and reduce a captured image on the display about the main subject area.

10. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki in view of Sakaegi and further in view of Sarbadhikari.

Claim 12 may be treated like claim 11. However, both Suzuki and Sakaegi are silent with regard to storing templates and using them with a composed image.

Sarbadhikari discloses an imaging system that includes a variety of templates on storage device 24 (column 10, lines 24-28). Digital processor 22 inserts the captured image into the template (column 10, lines 33-36). Only a section of the image may be used with the template, as defined by the user (column 10, lines 39-41). The advantage to surrounding a defined main subject area with a template is that little or no processing is necessary outside the camera to enhance the image. For this reason, it would have been obvious to have Suzuki's and Sakaegi's systems include image templates for use with the defined main subject area.

11. Claims 13 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki in view of Sakaegi and further in view of Shiota.

Regarding claim 13, Suzuki discloses a camera as described in the rejection of claim 1. The camera also has a printer 301 that may be connected to the camera. However, both Suzuki and Sakaegi are silent with regard to using a printer with an image processor for correcting image tone.

Shiota discloses an image reproduction system. Images captured by digital camera 1 are transferred via image server 2 to image reproducing apparatus 3. The recorded information accompanying the images may include a designation of the main subject of the image (column 5, lines 1-7). Image reproducing apparatus 3 has a set-up processing unit 11, which processes the image according to the recorded information accompanying the images (column 5, lines 50-54). This processing may include tone or color correction (column 2, lines 46-50). The final image is printed on printer 12.

An advantage to having a printer process color tone correction is that the colors may be corrected based on the printer's known ink attributes, resulting in a better-adjusted print. For this reason, it would have been obvious to have the cameras described by Suzuki and Sakaegi perform color correction in a connected printer rather than in the camera.

Regarding claim 16, Suzuki discloses a camera as described in the rejection of claim 1. However, both Suzuki and Sakaegi are silent with regard to using a display with an image processor for correcting image tone.

Shiota discloses an image reproduction system. Images captured by digital camera 1 are transferred via image server 2 to image reproducing apparatus 3. The recorded information accompanying the images may include a designation of the main subject of the image (column 5, lines 1-7). Image reproducing apparatus 3 has a set-up processing unit 11, which processes the image according to the recorded information accompanying the images (column 5, lines 50-54). This processing may include tone or color correction (column 2, lines 46-50). The final image is displayed on display interface 13.

An advantage to having a display process color tone correction is that the colors may be corrected based on the display's color reproduction characteristics, resulting in a better-adjusted display image. For this reason, it would have been obvious to have the cameras described by Suzuki and Sakaegi perform color correction in a connected display rather than in the camera.

12. Claims 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki in view of Sakaegi, further in view of Shiota, and further in view of Nagasaki.

Claim 14 may be treated like claim 13. However, Suzuki, Sakaegi, and Shiota are all silent with regard to using a printer than can reduce and enlarge an image about a reference point.

Nagasaki discloses a printer and camera combination. As shown in Figure 16, the camera enlarges an area around a specific point of a source image 85 to produce

an enlarged print 86. CPU 101 performs image processing and zooming (column 8, lines 18-26).

Nagasaki is silent with regard to performing an image reduction operation before printing. However, an advantage to performing a reduction operation is that an image may be produced that meets the size needs of a user. For this reason, it would have been obvious to have Nagasaki's printer reduce an image.

The advantage to having a printer print a reduced or enlarged image around a reference point the user can ensure the subject of an image remains in a print that is resized to meet his or her needs. For this reason, it would have been obvious to have Shiota's printer use its supplied main-subject designation to create a reduced or enlarged print.

Regarding claim 15, Suzuki discloses a camera as described in the rejection of claim 1. The camera also has a printer 301 that may be connected to the camera. However, both Suzuki and Sakaegi are silent with regard to using a printer with an image processor for expanding and reducing the supplied image.

Shiota discloses an image reproduction system. Images captured by digital camera 1 are transferred via image server 2 to image reproducing apparatus 3. The recorded information accompanying the images may include a designation of the main subject of the image (column 5, lines 1-7). Image reproducing apparatus 3 has a set-up processing unit 11, which processes the image according to the recorded information accompanying the images (column 5, lines 50-54). The final image is printed on printer 12.

An advantage to having a printer perform image processing is that the processor will better adjust the image to match the attributes of the printer. For this reason, it would have been obvious to have Suzuki's camera process images to be printed in the printer.

Suzuki, Sakaegi, and Shiota are all silent with regard to printing an expanded or reduced image.

Nagasaki discloses a printer and camera combination. As shown in Figure 16, the camera enlarges an area around a specific point from a source image 85 to produce an enlarged print 86. CPU 101 performs image processing and zooming (column 8, lines 18-26).

Nagasaki is silent with regard to performing an image reduction operation before printing. However, an advantage to performing a reduction operation is that an image may be produced that meets the size needs of a user. For this reason, it would have been obvious to have Nagasaki's printer reduce an image.

The advantage to having a printer print a reduced or enlarged image around a reference point the user can ensure the subject of an image remains in a print that is resized to meet his or her needs. For this reason, it would have been obvious to have Shiota's printer use its supplied main-subject designation to create a reduced or enlarged print.

13. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki in view of Sakaegi and further in view of Shiota and further in view of Arita.

Claim 17 may be treated like claim 16. However, Shiota is silent with regard to the display means displaying an expanded or reduced image.

Arita discloses a display means 10 connected to a camera. To perform electronic zooming, captured image data are read from RAM 7 (column 5, lines 12-22). This data is extracted from specified coordinates of the source image stored in RAM 7, depending on the amount of zooming requested by the user (column 3, lines 9-12). If an image may be expanded on display means 10, it is inherent that it may then be reduced to restore it to its original size.

The advantage to reducing and enlarging a captured image about a reference point is that the user may view the details of a captured image to decide if the image is adequate while ignoring those parts of the image not relevant. For this reason, it would have been obvious to have the display means disclosed by Shiota enlarge and reduce a captured image on the display about the main subject area supplied to it by the camera.

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason T. Whipkey, whose telephone number is (703)

305-1819. The examiner can normally be reached Monday through Friday from 8 A.M. to 5:30 P.M. eastern daylight time, alternating Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy R. Garber, can be reached on (703) 305-4929. The fax phone number for the organization where this application or proceeding is assigned are (703) 872-9314 for both regular communication and After Final communication.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office, whose telephone number is (703) 306-0377.


Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to (703) 872-9314 for either formal or informal communications intended for entry. (For informal or draft communications, please label "**PROPOSED**" or "**DRAFT**".)

Hand-delivered responses should be brought to the sixth floor receptionist of Crystal Park II, 2121 Crystal Drive in Arlington, Virginia.

JTW
JTW
August 1, 2002


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